

NOTES ON GEOGRAPHIC DISTRIBUTION

**Insecta, Hymenoptera, Apidae: Range extensions and
new state records from Santa Catarina, Brazil**

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Between 25 and 30 thousand bee species are estimated to be distributed in the different regions of the world (Michener 2007). Moure et al. (2007) list 1,678 valid names for Brazilian species, which are distributed into five subfamilies (Andreninae, Apinae, Colletinae, Halictinae, and Megachilinae, *sensu* Melo and Gonçalves 2005). Nevertheless, Silveira et al. (2002) believe that the Brazilian bee fauna is composed of approximately 3,000 species.

According to Moure et al. (2007), 221 valid bee names are recorded for the state of Santa Catarina. However, Steiner et al. (2006) mentions at least 393 morphospecies for that state, therefore potentially and significantly raising the number of bee species known to occur in Santa Catarina.

Santa Catarina is located in the southern region of Brazil, covering an area of 95,346 km² and is bordered by the states of Paraná (in the north) and Rio Grande do Sul (in the south), the Atlantic Ocean (in the east) and Argentina (in the west).

The new records of species for the state were established through the comparison with the bee-species distribution in Brazil according to Silveira et al. (2002), Moure et al. (2007), and systematic surveys of local bee faunas performed in Santa Catarina (Ortolan & Laroca 1996; Steiner et al. 2006; Krug and Alves-dos-Santos 2008) (Figure 1). The material examined is deposited in the Zoological Collection of the *Fundação Universidade Regional de Blumenau* (CZFURB-IN) and in the Entomological Collection "Pe. J. S.

Moure" (DZUP) of the Zoology Department, *Universidade Federal do Paraná* (UFPR), Curitiba (specimens referred to as "[DZUP]"). Species were identified by Dr. Gabriel A. R. Melo (UFPR) and Dra. Danúncia Urban (UFPR).

The new records of species are ordered alphabetically below according to subfamilies, genera and species. The data are followed by additional comments for some species.

Apinae

Dithygater seabrai Moure and Michener, 1955

Examined material: BRAZIL, *Santa Catarina*: Blumenau, 2^o [1^o DZUP], *Parque Nacional da Serra do Itajaí, Região da Terceira Vargem*, 27°03'53.91" S, 49°05'44.66" W, 392 m above sea level (a.s.l.), in *Calathea* sp. (Maranthaceae), 16-XII-2007, D. R. Luz.

Comments: This is also the first record for the genus in Santa Catarina.

Florilegus (Florilegus) condignus (Cresson, 1878)

Examined material: BRAZIL, *Santa Catarina*: Indaial, 1^o, *Parque Nacional da Serra do Itajaí, Rancho do Mono*, 27°03'00" S, 49°08'57" W, 650 m a.s.l., in *Cuphea origanifolia* (Lythraceae), 24-II-2007, G. V. Barroso.

Mesoplia rufipes (Perty, 1833)

Examined material: BRAZIL, *Santa Catarina*: Rio dos Cedros, 1^o, *Alto Rio dos Cedros*, 12-I-1973, M. Lauterjung.

Comments: This is also the first record for the genus in Santa Catarina.

Monoeca brasiliensis Lepeletier and Serville, 1828

Examined material: BRAZIL, *Santa Catarina*: Rio dos Cedros, 2 \bar{A} , *Alto Rio dos Cedros*, 18-I-1973, M. Lauterjung; 6 \bar{A} , *Alto Rio dos Cedros*, 15-I-1973, M. Lauterjung.

Protosiris mcginleyi (Shanks, 1986)

Examined material: BRAZIL, *Santa Catarina*: Blumenau, 4 \bar{A} [2 \bar{A} DZUP], *Parque Nacional da Serra do Itajaí, Região da Terceira Vargem*, 27°03'53.91" S, 49°05'44.66" W, 392 m a.s.l., in *Cuphea organifolia* (Lythraceae), 28-X-2007, D. R. Luz; 1 \bar{A} [DZUP], at the same site, in *Cuphea organifolia* (Lythraceae), 16-XII-2007, G. V. Barroso.

Scaptotrigona tubiba (Smith, 1863)

Examined material: BRAZIL, *Santa Catarina*: Indaial, 2 \bar{A} [1 \bar{A} DZUP], *Parque Nacional da Serra do Itajaí, Rancho do Mono*, 27°03'00" S, 49°08'57" W, 650 m a.s.l., in *Sapium glandulatum* (Euphorbiaceae), 22-X-2006, D. R. Luz; 1 \bar{A} , at the same site, in *Sapium glandulatum* (Euphorbiaceae), 22-X-2006, G. V. Barroso.

Colletinae

Mydrosoma aterrimum (Fries, 1925)

Examined material: BRAZIL, *Santa Catarina*: Blumenau, 1 \bar{A} [DZUP], *Parque Nacional da Serra do Itajaí, Região da Terceira Vargem*,

27°03'53.91" S, 49°05'44.66" W, 392 m a.s.l., 15-XII-2007, D. R. Luz.

Zikanapis seabrai Moure, 1953

Examined material: BRAZIL, *Santa Catarina*: Indaial, 1 \bar{A} , *Parque Nacional da Serra do Itajaí, Rancho do Mono*, 27°03'00" S, 49°08'57" W, 650 m a.s.l., 29-IX-2007, G. V. Barroso.

Halictinae

Augochloropsis nasuta Moure, 1944

Examined material: BRASIL, *Santa Catarina*: Indaial, 2 \bar{A} [1 \bar{A} DZUP], *Parque Nacional da Serra do Itajaí, Rancho do Mono*, 27°03'00" S, 49°08'57" W, 650 m a.s.l., in *Cyrtocymura scorpioides* (Asteraceae), 22-X-2006, D. R. Luz; 1 \bar{A} , at the same site, in *Stenandrium* sp. (Acanthaceae), 22-X-2006, D. R. Luz; 1 \bar{A} , at the same site, 22-X-2006, D. R. Luz; 1 \bar{A} , at the same site, in *Cuphea mesostemon* (Lythraceae), 15-XII-2006, D. R. Luz; 1 \bar{A} , at the same site, 15-XII-2006, D. R. Luz; 2 \bar{A} [1 \bar{A} DZUP], at the same site, in *Cuphea mesostemon* (Lythraceae), 16-XII-2006, D. R. Luz; 1 \bar{A} , at the same site, in *Stenandrium* sp. (Acanthaceae), 16-XII-2006, G. V. Barroso; 1 \bar{A} , at the same site, in *Conyza* sp. (Asteraceae), 16-XII-2006, G. V. Barroso; 1 \bar{A} , at the same site, in *Heimia myrtifolia* (Lythraceae), 24-II-2007, G. V. Barroso. Blumenau, 1 \bar{A} , *Parque Nacional da Serra do Itajaí, Região da Terceira Vargem*, 27°03'53.91" S, 49°05'44.66" W, 392 m a.s.l., 24-I-2007, G. V. Barroso.

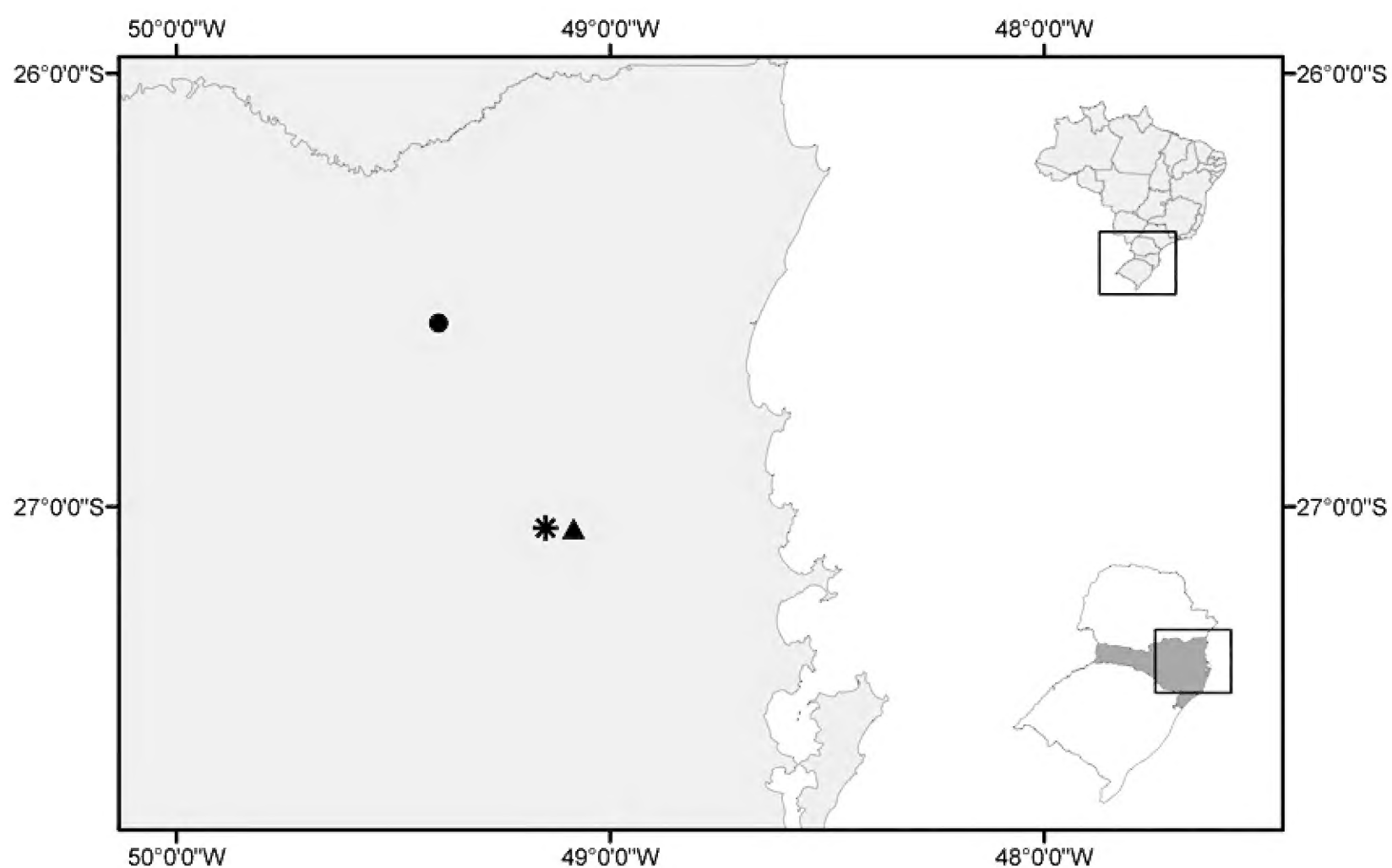


Figure 1. Field collection points of the new records from the state of Santa Catarina, Brazil: Blumenau (triangle); Indaial (asterisk); *Rio dos Cedros* (dot).

Augochloropsis patens (Vachal, 1903)

Examined material: BRAZIL, *Santa Catarina*: Blumenau, 1^ª, *Parque Nacional da Serra do Itajaí, Região da Terceira Vargem*, 27°03'53.91" S, 49°05'44.66" W, 392 m a.s.l., in *Jaegeria* sp. (Asteraceae), 24-III-2007, G. V. Barroso; 1^ª, at the same site, in *Jaegeria* sp. (Asteraceae), 25-III-2007, D. R. Luz.

Rhectomia mourei (Eickwort, 1969)

Examined material: BRAZIL, *Santa Catarina*: Indaial, 1^ª, *Parque Nacional da Serra do Itajaí, Rancho do Mono*, 27°03'00" S, 49°08'57" W, 650 m a.s.l., in *Cuphea mesostemon* (Lythraceae), 15-XII-2006, D. R. Luz; 2^ª, at the same site, in *Cuphea mesostemon* (Lythraceae), 16-XII-2006, D. R. Luz;

1^ª [DZUP], at the same site, 16-XII-2006, D. R. Luz.

Dialictus travassosi (Moure, 1940)

Examined material: BRAZIL, *Santa Catarina*: Indaial, 1^ª, *Parque Nacional da Serra do Itajaí, Rancho do Mono*, 27°03'00" S, 49°08'57" W, 650 m a.s.l., in *Sapium glandulatum* (Euphorbiaceae), 22-X-2006, D. R. Luz.

Megachilinae

Megachile (Trichurochile) thygaterella Schrottky, 1913

Examined material: BRAZIL, *Santa Catarina*: *Rio dos Cedros*, 1^ª, *Alto Rio dos Cedros*, 20-IV-1973, M. Lauterjung; 1^ª, at the same site, 24-XI-1973, M. Lauterjung.

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